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ADDRESS

BEFORE THE

PHILADELPHIA COUNTY MEDICAL SOCIETY.

DELIVERED

FEBRUARY 11, 1863.

BY

ALFRED STILLÉ, M. D.,

AT THE CLOSE OF HIS OFFICIAL TERM AS PRESIDENT.

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A D D R E S S.

GENTLEMEN:—

THE rules of our Society require its President to deliver a public Address at the close of his official term. Under ordinary circumstances, it may be supposed that this duty is not an unwelcome one, since it is the last which his office imposes, and it lends some éclat to his laying down an authority which he may not always have been able to exercise satisfactorily either to himself or his constituents. On the present occasion, I have nothing to recall but what is pleasant; a year of harmony in sentiment and action, and one not unfruitful in knowledge to our medical brotherhood. That I should have been selected to preside among you during such a period, I cannot but esteem most fortunate, and as giving zest to the gratitude I feel for the unlooked-for distinction you conferred in calling me to this honorable place.

Upon such occasions the Presiding Officer must usually be disposed to indulge in sprightly thoughts and genial emotions. He cannot have witnessed the scintillations of talent struck out in the scientific collision of those around him without having awakened in himself whatever enthusiasm comports with his temperament; and whether, in the intellectual tournament at which he was the umpire, the combat always maintained itself within the bounds of knightly courtesy, or at times degenerated into earnest or even angry dispute, he can scarcely have failed to imbibe some inspiration of enthusiasm, nor perhaps, have always escaped some taint of the bitterness with which opinions and doctrines may have been defended and attacked.

But no such vivid recollections of our last year's history stimulate the imagination or warm the feelings. From whatever cause—whether from the absence in other and more real conflicts of those who might have lent the charm of their talents to our meetings, or

whether the same apathy which so generally affects the profession detained from our meetings by far the larger proportion of those who are competent to teach us from their own experience while they learn from ours—and I will not venture to decide the question—it is still certain that talent, knowledge, skill, and eloquence enough exist among the members of this Society to have rendered their discussions much more engaging and instructive, had they but overcome the indifference which their absence manifested, or the timidity which restrained them from communicating the fruits of their observation and meditation.

It is very true that scientific societies are far from being useful in proportion to the number of their members. The most valuable papers in the volumes of published Memoirs and Transactions, which form one of the choicest stores of medical knowledge, have often been read before the small coterie of a snug back parlor, or a scattered audience in a more imposing hall. But it is the very purpose of this Society to popularize science within the medical profession, to bring together those who have had less and those who have had greater opportunities for culture and experience; to harmonize in thought as well as feeling the magnates who have raised themselves to fame, and the laymen who have pursued the more humble and unobtrusive ways of usefulness. While its meetings, then, are attended by so few, a principal purpose of its institution is frustrated, and the profession in this city does not avail itself of the influences by which the deficiencies and excesses of its individual members might be corrected, and the whole body made to act harmoniously for the good of every part.

The only means of attracting together and maintaining the cohesion of these integral parts is to present such motives to a more general attendance at the meetings as would be found in the interest of the papers and debates. It would imply a lower estimate than I am willing to form of my fellow members, to suppose that neither the scientific nor the practical interest of the subjects discussed, their development by the knowledge and skill of some, or their analysis by the critical acumen of others, had attractions sufficient to draw an audience together ready to profit by and competent to judge of them. And yet, it must be confessed, we are either insensible to scientific and literary attractions, or else none are presented powerful enough to disturb the equilibrium

of our indifference. Perhaps both reasons are, to a certain extent, valid. Perhaps we are too apt to neglect those studies which raise the practice of medicine above the level of the routine practitioner's or the sick-nurse's experience, studies which make it an aggregate of problems that none but the most comprehensive grasp of mind, and, at the same time, the minutest scrutiny, need attempt to solve —which elevate it above all philosophies save one, and which, indeed, are fittest to illustrate the mysteries of religion itself by the analogy of those equally dark and unfathomable problems which abound in the science of life.

Surely to every member of this Society the facts and problems of medicine must be attractive. If all do not feel able to expound them, none can fail to take pleasure in hearing them expounded, provided it be done with such attention to matter and manner as proves the possession of knowledge and of due preparation in using it. We may rest assured that if we duly prepare for the business of our meetings, we shall not lack fit audience, nor will the number of those be few whose presence will applaud our efforts to secure their approbation. Soon to assemble in a building dedicated exclusively to the medical profession, the first of the kind that has been erected in our city, may we not hope that the genius of the place will inspire us with fresh ardor in cultivating the branches of knowledge sacred to science and humanity, and to which we have devoted our lives? Let this period become an epoch in the history of our Society; and let us all labor to elevate our scientific character upon the foundation of reason and experience, the latter constituting the firm and indestructible materials, and the former the cement that unites them.

Nothing is more possible, nothing, I suspect, is more common, than for increasing years to bring no accession to professional ability. Every observant man must have remarked that there is a certain low grade of attainment which is very early reached, in all professions, by those members of it who are actively and exclusively engaged in its practical duties, and beyond which they never venture to rise. The world never judges men according to what they are, but according to what they seem to be. Not a few, therefore, content themselves with that slender stock of accomplishments which will enable them to pass muster with the public; and, indeed, they perform their duties with a certain popular success. In other

pursuits the tests of proficiency are simpler and more readily applied than in ours. The mechanic's work is judged of by the practical standard of common sense, a standard so notoriously competent to measure his ability, that it would cost him as much ingenuity to conceal his deficiencies, as really suffices, if properly expended, to render him a skilful workman. The preacher soon finds his proper level; for among his hearers there are few who are not familiar with the doctrines and precepts of religion, and always some with whom sound does not pass for sense, nor rhapsody for eloquence. At the bar the orator must confront on one side the common sense of a jury, and on the other the stern and impartial estimate of judges skilled in the learning of their profession, and familiar with the shifts which plausible presumption adopts to conceal a barrenness of argument or an ignorance of settled principles.

In the medical profession it is different. It is quite possible—unfortunately it is very common—for the busiest and most popular practitioner not only to be profoundly ignorant of those great principles which anatomy, physiology, and chemistry have established, and of all the results to which the experimental investigation of remedies and their operation have attained, but actually to live year after year in constant contact with the sick, with more opportunities for observation than Hippocrates, or Galen, or Sydenham enjoyed, and yet to add nothing to his stock of knowledge, nothing to his means of cure, nothing by which others can profit, or which, when he dies, will rescue his name from speedy and total oblivion.

We work in the dark where there is no lynx-eyed critic to discern our mistakes, and no impartial judge to correct them. Our errors in detecting disease, our blunders in treating it, are all concealed by the walls of the sick chamber, are atoned for by the almost inexhaustible resources of a bountiful nature, or are covered up by the earth which hides perchance the victim of our ignorance. For us there is not the same motive to excellence which controls him whose works are judged in the open light of day. The applause of interested crowds does not await the success which crowns a happy application of medical skill. The prizes are few, and seldom great, which repay the highest exertion of diagnostic expertness or curative power. The golden profits of the physician's labor are proportioned much oftener to his popularity than his

accomplishments, or they are acquired when toil and trouble have blunted his sense of enjoyment, and when he values them less for himself than for the sake of those who are dependent upon him.

It is not surprising, then, that so many regard their profession as the common tradesman does his trade, merely as a means of gaining the largest profits with the smallest expenditure of labor, or that they should be tempted to consider superfluous all exertion which does not promise a substantial return. It is not surprising that they are prone to abase themselves to the level of ignorant patients, who consider the grudgingly paid fee a full equivalent for the preservation of life or limb, nor that they look with wonder, if not contempt, at physicians who sacrifice profit to knowledge, and snatch time even from their natural rest to enlarge their information by study, by experiments, or by that analytical examination of the results of their own observation which is like winnowing the wheat from the chaff, grinding it into flour, and converting it into bread, which shall become the staff of their intellectual life. How often do we, after the death of these unassuming men, hear the question asked, What have they done that they should be remembered? How often do we find sad evidence, in their scanty store of medical literature, that they were ignorant of what every educated physician should know! How often, during their lifetime, when they venture to relate experience which they suppose altogether peculiar, or to propose methods which they believe original, are they surprised to learn that their observations are old and familiar, and that their inventions are forestalled, and have perhaps already been discarded by judges competent to decide upon their value!

To say that these things are natural, is almost to pronounce them wrong; and, as in this life, our chief end is to rectify and curb the evil tendencies that are in us, as for this the whole social system and all civil polity exist, so in the more restricted sphere of professional relations, we cannot dispense, on the one hand with an impelling, and on the other with a restraining influence. At every step we stand in need of motives to action, which if we do not receive, we halt in our progress towards excellence, or retrograde into sloth and listlessness. If we had half the greed for knowledge that we have for place and gold, the desert of our ignorance would soon blossom as the rose. Nature everywhere offers to teach us, and to make us

ministers and interpreters of her laws; but we too often refuse to purchase her wealth of wisdom at the price of patient toil. Years roll over us, and as each one glides into the silent past, and our faculties grow duller and feebler, she still offers us the treasures of knowledge, yet always at the same price, as the Sibyl did to Tarquin the verses which foretold the fortune of Rome. The treasures we may hope to gather are perpetually lessening with our years, and in a like degree our enthusiasm cools, and the high aspirations that we once indulged in wane. Such is peculiarly our condition when our intellectual existence is isolated from that of our fellow-men. As it is a general law that the perpetuation of species requires the concurrence of more than one individual, so the intercourse and union of minds are essential to the fecundation of ideas. Each one brings something to the new creation; one the spirit, the other the form, or both confer upon it the peculiarities of each. In the boys' debating club, as well as in the most august arena of parliamentary strife or of academic controversy, one is surprised and delighted to observe how thought begets thought and inspiration kindles inspiration, until the subject which was at first obscure, shadowy, and undefined, stands out in bold relief substantial and palpable to every one's apprehension.

Above all other subjects those connected with practical medicine and surgery are susceptible of such an illumination. Every one, however remote his habitual field of occupation may be from the common sphere of other physicians, may have it in his power to produce evidence which will complete a proof long sought for elsewhere, or to demonstrate the virtues of a remedy which his more gifted or his busier brethren have overlooked. Into this mart of exchange we may all carry whatever golden grains of truth we have discovered, and feel very sure that, however precious the commodity, it will not long be wanting an equivalent. Indeed, the very nature of true knowledge is like gold; its value begins from the moment it is exchanged for something else of value. Who that ever acquired it did not feel that he enriched himself while he was imparting it to others? that while he alone possessed it, its existence could hardly be recognized as real—that, like the embryo in its mother's womb, with all its powers and capacities dormant, it was valueless until it came forth into the light of day to play its part for good or evil among mankind. It

is the prerogative of humanity alone thus to be more blessed in giving than in receiving. In the history of our science and art we see its most illustrious cultivators eager to share their discoveries and inventions with their brethren. Indeed, to such an eagerness we are indebted for almost all the literature of both departments of medicine—a literature which, in these latter days, has filled the whole civilized world. Nor is such liberality to be attributed to a thirst for applause alone. The tendency to it is natural and instinctive, and is one of the godlike though sullied lineaments which attest our divine parentage. So instinctive is it that, as we have witnessed in a recent example, the attempt to restrict by legal prohibition the use of a precious remedy, was met with a universal and unanimous outburst of reprobation.

No, there is strength in union, not only of the body corporate, political, or social, against those who would molest it, but there is strength multiplied to each one by his contact with the rest—strength developed by induction (if I may be allowed the expression), and which endures only so long as this contact is maintained. Let us, then, cultivate the sentiment that the bond which binds into one the many so dissimilar in tastes, habits, associations, opinions, and aspirations, is not only most salutary in its influence upon our mental development and professional advancement, but that it is also one of the choicest means at our command to promote that fraternal good-will and hearty co-operation without which our profession would become little better than a horde of ruffians, and the social edifice itself would crumble into the ruins of barbarism.

Philadelphia has a distinguished reputation as a seat of medical authority. For a long time, and until a very recent period, all other American schools bore no comparison with hers either in their number and excellence or in the proportion of native physicians whom they educated. During three-quarters of a century she stood *facile princeps* among American seats of learning and science, and her claims to pre-eminence were uncontested. But how is it now? Gradually, in other cities, and especially in the commercial metropolis, rivals have grown up which threaten to eclipse her medical institutions, and to draw away from her a large number of the young men who are pursuing the study of medicine. There was a time when medical professors were believed to fulfil

their whole duty if they presented in an attractive style and manner the recognized conclusions of scientific and clinical observers; and if sometimes men of original genius and of keen investigating powers delighted and controlled their classes with eloquent harangues, it must be confessed that the prelections of all had about them a stronger smell of the lamp than of the dissecting-room, the sick chamber, or the laboratory, and were better adapted to charm and instruct than to incite to original observation, or to furnish the best means of cultivating it.

So evident was this defect, and yet so indistinctly was its nature recognized, that on a memorable occasion the members of a medical faculty in another city—gentlemen distinguished by every personal and professional excellence—warmly contested the propriety of lengthening the medical lecture term, upon the ground that lectures are only substitutes for books, and that, as the latter abound, the former, if not superfluous, are at least unessential, and, therefore, that an increase in their number is to be deprecated. The true ground of adverse criticism was lost sight of, viz.: that public medical teaching should chiefly concern itself with what can be demonstrated and illustrated by material objects, whether at the bedside or in the class-room, because it is that which the physician will never have an opportunity to examine under proper direction, except during his pupilage.

The scanty provision for hospital instruction in one of our public institutions, the absolute closure against us for a long while of the larger hospital which had once afforded clinical experience to our students, and the sorry substitute for it which the colleges adopted, all combined to diminish the attractions of our city as a school of medicine, at the very time when our principal rival was opening one hospital after another to clinical teaching, and in two of them creating independent faculties of medicine. It is not surprising that these institutions, which employ gentlemen of the very highest ability and reputation as scientific clinical teachers, should have attracted to themselves a large number of young men who would have preferred to be educated here, and that a medical education in them should have come to be regarded by very many as the best which the country affords.

The benefits of schools in hospitals are not by any means limited to their influence on the medical education of undergraduates.

Perhaps this is not even the greatest good which flows directly from them. They also awaken scientific rivalry among the teachers themselves, and stimulate them to make the best use they can of their abundant opportunities of investigating the pathological conditions which are at once the causes and effects of disease. I need not here enumerate the instances during the last years in which discussions upon various important questions of medical science and practice have taken place in the societies of our sister city, discussions which neither in fulness of matter, nor in skill of argument, will compare unfavorably with those held under similar circumstances in European capitals. In a word, these two cities, in their medical history, forcibly remind one of Edinburgh and London. While scholastic learning and didactic accomplishments in teaching were held in supreme regard, the former place enjoyed the greatest reputation abroad, and even at home her graduates rose to the highest honors in the metropolitan profession. But, within the last quarter of a century, the period, in other words, during which physics have been applied to medicine, and since auscultation, percussion, and their kindred methods of investigation, microscopical, chemical, and physiological, have laid the phenomena of life and of disease open to the senses, the hospitals of London have become the most abundant by far of all the sources from which the natural history of diseases is being composed. Thus, collectively, as a medical school, they have eclipsed their former rival and superior.

If we are not willing that the ancient fame of Philadelphia should suffer a similar obscuration, we must take warning in time, and do what lies in each of us to maintain and elevate the scientific standing of the profession around us. Not a little has been done within a few years in improving our knowledge of morbid anatomy and its related branches. The members of a Society among us devoted to that subject will, I doubt not, testify to its fostering and stimulating influence. Much may also be hoped directly and indirectly from the generous bequest of the late Dr. Mütter to the College of Physicians. Valuable in scientific illustration of the branch he excelled in practising and teaching, and in the provision which it makes for the encouragement of original research, and for the diffusion of pathological knowledge, we may congratulate ourselves that its preservation among us, and its perpetual useful-

ness according to the benevolent wishes of its founder, have been secured by the contributions of our sister Institution, and the enlightened spirit of liberality which has prompted not a few persons beyond the limits of our profession to take part with it in this very important undertaking.

But perhaps much more may be anticipated from occasions of medical experience which we are gaining, alas! at the cost of a wounded if not dismembered nationality. When, during several months past, I was reminded that the duty I am now attempting to perform would be required of me, I confess that I shrank from thinking of it, as one shrinks from a trial of strength to which he feels unequal, or from scenes of merriment when his heart is heavy with grief. Flowers of rhetoric do not blossom in the furnace heat of civil war. Within all is disquiet and everywhere without is gloom. Like lightning, the imagination leaps from cloud to cloud only to reveal the blackness of the picture; or, like the stormy petrel, flits from wave to wave of our sea of troubles, now borne aloft into the sunshine of hope, now buried in the abyss of despair, but in no direction finding rest for its weariness, and seeing no refuge, even in the distance, from the ruin that seems ready to overwhelm it. In all national convulsions such as now affect us, as in the midst of a natural tempest, it is indeed difficult to look forward to serener times, or to realize the thought that an end must come even to the direst troubles. It is no part of my duty, nor in this place would it be proper to suggest any grounds of a political nature upon which both hope and consolation may repose; but it will not be amiss to refer to some considerations of a professional kind which may help to console us as physicians, leaving to other times and other tongues to pronounce those words of cheer which it is most becoming should be spoken to us as citizens and men, and which are most in harmony with the eternal laws of truth and justice.

War brings in its immediate train innumerable causes of disease and death. The battle-field furnishes to the military surgeon a hundredfold the experience which civil practice could afford, in a knowledge of wounds and their consequences. The fatigues, exposures and privations of the march, the inclemency of the seasons, malarial and foul effluvia, the habits of camp and barrack life, the insufficient, unwholesome, and ill-prepared food, and a thousand

subordinate causes, render the soldier, however vigorous by nature, far more liable than the private citizen to disease, while they generate a number of affections which, in civil life, occur under very different forms. It is not singular, then, that in all times of war the medical officers of land and sea forces should have made valuable contributions to our knowledge of diseases and their cure. In England the Pringles and Heberdens of the older time, and the numerous pupils of experience in the Peninsular war and other cotemporaneous campaigns, exerted a very marked, and, it may be added, a very enlightened influence upon medicine and surgery. The continental military surgeons, with Larrey at their head, impressed upon the practice and doctrines of the profession all over the world a character no less decided. The war in which we are now engaged has made it necessary to withdraw from private practice a very large number of physicians, most of them ardent with the enthusiasm of early manhood, and many of them well qualified to investigate the laws of disease, and to enrich us with new facts and novel views. Fortunately for the cause of humanity and of science, the Medical Department of the army is under the control of a vigorous and sagacious mind, thoroughly acquainted with the most recent results of investigation, and himself one of the most eminent of American original observers. He has, it is well known, determined that his subordinates shall contribute their full share of materials to illustrate the medical history of our civil war, and during its progress lay the foundations of a monument which shall commemorate the beginning of a new era in our profession.

It may perhaps be doubted whether the medical, as distinguished from the surgical results of observation in military life are of very great importance except in reference to the diseases of men placed in analogous situations and susceptible of the same influences. But as a contribution to military hygiene and military medical pathology, the experience of our army surgeons ought to possess incalculable value, for never, in modern times, have so many soldiers been simultaneously under arms, and never has so large a field been opened for the trial of the various methods recommended by experience for the prevention and cure of disease. On the other hand, the imperfect discipline which has necessarily existed in an army, nearly every man of which was but the other day

engaged in some peaceful avocation, while it has made the selection of skilful medical officers all the more imperative, has rendered the entrance of too many incompetent persons into the medical corps an inevitable evil. Yet making due allowance for this defect, a defect in some degree corrected by the patriotic labors of the Sanitary Commission, and also for the still more general one that the literary as well as the scientific education of too many is greatly inferior to what it ought to be, there still remains the fact that the medical staff of the regular and of the volunteer armies is, in general, composed of laborious, conscientious, and painstaking men, while many are very superior in scientific attainments and in practical skill. Chiefly from these last we must expect to receive a permanent, true, and useful history of the medical events of the war.

During the last seven months I have had an opportunity, in one of the great military hospitals of this city, to become somewhat familiar with several of the forms of chronic disease most prevalent among the soldiers. It may not be uninteresting briefly to notice them on this occasion. The most common, by far, have been affections of the bowels, which originated as diarrhoeas, then assumed more or less of the dysenteric form, and finally in some cases presented typhoid fever as an intercurrent disease. These several elements combined, one might suppose, would certainly involve the permanent destruction of health, or a very prolonged and vacillating convalescence. Such, indeed, is the fact, and it appears to me a very unusual thing for the health of the patients I have prominently in view to be so completely restored as to render their return to active service a prudent measure. The least excess of fatigue, a change of weather from dry to cold and damp, the slightest over-indulgence in ordinary food, particularly if crude and bulky, is sufficient to renew the characteristic alvine discharges, and render a resumption of dietetic and medicinal treatment imperative. It is unnecessary to mention in detail the various medicines I have used, only to find them inefficacious in diminishing the frequency of the stools; it need only be stated that the most useful remedy has appeared to me to be tannic acid, given in a pilular form, and in doses of three grains with one-twentieth of a grain of sulphate of morphia repeated three or four times a day. But neither did this nor any other medicine exert a beneficial influence unless the

diet was regulated in the strictest manner. As a general rule, it has been found necessary to confine the patients absolutely to bread or soda-biscuit and milk, and to this strict regimen I attribute whatever success in the cure of the disease I have obtained. In many cases treated after this simple manner, I have had the satisfaction of witnessing a gradual subsidence of the alvine discharges, and a state of emaciation and debility, sometimes extreme, followed by the restoration of flesh and strength. It must be admitted, however, that even after the most perfect cures a state of intestinal susceptibility has sometimes continued, which very trifling errors of diet converted into active diarrhoea. In some cases the association of lime-water with milk, in the proportion of one-fourth or one-third, has been manifestly useful. As the improvement advanced, rice and farina have been added to the dietary. I take this occasion to record my protest against the unfermented bread, so-called, which is used in some of the government hospitals. However superior it may be to ordinary camp bread, and wholesome for men of sound digestion, a more insipid, not to say unsavory, food, unpleasant to eat and hard to digest, was never furnished to the sick; and, as it must be used upon the day when it is baked, it becomes the frequent cause of exciting bowel-complaints, and constantly of prolonging them. It is not a wise economy which by a saving in the price of food becomes prodigal of causes of disease.

It has been mentioned in my hearing by more than one hospital surgeon that cases of ascites are common in connection with chronic diarrhoea. My own experience has not furnished me with a single instance of the kind. In some cases of the intestinal disorder distension of the abdomen was occasionally observed, but in all of them it was tympanitic, and appeared sometimes to be produced by the bread, which, being unfermented when eaten, seemed to develop a prodigious quantity of gas during digestion. Tympanitis, however, sometimes occurred without any apparent intestinal or gastric disorder, or even the least alteration of the general health. In these cases no treatment of it was efficacious.

The two most ordinary systemic complications of diarrhoea were malarial cachexia and scurvy. The former impressed upon the patient a peculiar sallow or muddy paleness, and seemed to be a common cause of the gastric dyspepsia which so frequently rendered its treatment abortive, or at least prevented remedies from

being permanently curative. The preparations of cinchona were efficacious in curing whatever periodical phenomena arose, but had no influence upon the fundamental cachexia. Nor did iron always exert the specific influence which it usually displays in pure anemia. Indeed, I am inclined to believe that the return of warm weather and regular and active exercise in the open air will be found the only permanent remedies for this state of impaired health. This is the more likely to be true of those cases, and they are the majority, in which malarial anemia is maintained by chronic disorder of the bowels. The milder ones, occurring in young men of a robust constitution and previously good health, sometimes recover under the influence of iron and a milk diet, but many more are rebellious to every form of medicinal treatment.

This remark is still more applicable to cases in which, along with diarrhoea, or even without it as a constant symptom, there is also a scorbutic taint. It has shown itself in several instances by oedema of the lower extremities and ecchymosis of these and other parts. No instances of spongy gums and loosened teeth have been noticed by me, but in one case the exacerbations of the swelling and discoloration of the legs were coincident with an increase of diarrhoea and an insufferable fetor of the breath. Oedema of the ankles, without ecchymotic discoloration, was observed in many other cases. It is highly probable that a scorbutic condition often existed when the characteristic symptoms of scurvy were absent; but neither the phenomena themselves nor the effects of treatment positively demonstrated it. As to these effects, it appeared to me that lemon-juice and fresh vegetables, the specific remedies for scurvy, were less efficacious than their reputation led me to expect; nor did it seem possible, in the greater number of cases, to carry the improvement beyond a certain point much below the average of good health. Of these cases it may be said emphatically, as with less positiveness it may be of the other chronic affections already noticed, that comparatively few of them can be expected to recover in the wards of a hospital. They stand pre-eminently in need of fresh air, sunshine, and exercise combined. Hence I have believed and urged that not a few soldiers who are now permanently invalidated would have been saved to their country's service had appropriate provision been made for their systematic exercise in the open air. The advantages of a rural site for a hospital, which

in reality are immense, are thrown away if patients of the classes referred to are not required as well as invited to pass a portion of every day in the fields or the woods in summer, and during the cold season in sheds with a southern exposure, where they can be exercised in the drill or in gymnastics and athletic sports. The authorities who regulate these matters have perhaps too much faith in drugs, or, wanting that, in some indefinable sanitary influence of a hospital residence. Rest and comparatively excellent food are powerful aids in restoring health broken down by the fatigues of a military campaign, but the monotony and indolence of hospital life are ill suited to restore the constitution to its original vigor.

As closely connected with scurvy, if we may conclude from the conditions in which it is found to exist, muscular rheumatism may be mentioned; but it must not be forgotten that the scorbutic diathesis, as a merely debilitating influence, predisposes to all diseases excited by external causes, and hence pre-eminently to rheumatism. The direct causes of the latter affection, indeed, surround the soldier at every step of an active campaign, and it is only a matter of surprise that an army of stalwart men is not speedily converted into a horde of cripples. Out of some scores of cases that have passed under my observation, I do not remember a single one in which the attack began as an acute inflammation. They were, all of them, cases of muscular rheumatism, or else of subacute or primarily chronic rheumatism of the external ligaments of the joints, and often resulted in false ankylosis or in muscular atrophy of the affected limb. In some cases of the latter sort the stiffness of the joints yielded to a diligent and persevering use of active and passive motion. A striking example of this result was presented by a man who for months had been bent almost double, but who left the hospital nearly erect. In cases characterized by fugitive pains in different parts of the body, I believe that cod-liver oil will prove to be the most effectual cure; but it exerts only a feeble power when the joints are stiffened.

An affection confounded with muscular rheumatism by the patients themselves, and, according to their statements, by some physicians also, is intercostal neuralgia. In private life this affection is usually observed among delicate and feeble persons, especially of the female sex; but the robust soldiers presented it as often as the infirm. It was characterized by tenderness under pressure of

the cutaneous branches of the intercostal nerves on either side of the spinal column, or along the lateral regions of the chest, and was attended with aching, burning, or boring sensations in these parts, and by sharp, lancinating pains running to the front of the chest. The cause of this affection was alone peculiar, and furnishes my reason for alluding to it in this place. It was uniformly referred by the patients to the action of the knapsack, either directly by its contusive blows upon the back in marching, or indirectly by its producing a free perspiration of the part, which afterwards became chilled on the removal of the knapsack when the wind was blowing, or else by getting the back wet with rain or in wading streams. Further than this, which to me was a novel cause, particularly upon so large a scale, this neuralgia presented no peculiarities, and was generally cured by means of stimulating and narcotic liniments or by superficial vesication.

In connection, partly, with the action of the heavy knapsack on the chest, two other affections may be mentioned in conclusion. These are palpitation of the heart and hæmoptysis. Both were ascribed by some patients to the cause just referred to; by others to prolonged or very rapid marching. The hæmoptysis which occurred in numerous instances, and quite independently of any signs of pulmonary tubercles, appears generally to have resulted from direct violence, such as a fall upon the chest, a blow from some missile, as a spent ball, the fragment of a shell, &c., or from compression between two heavy bodies. It was surprising that in several cases the hæmoptysis continued long after the general health appeared to have become very good. I should have suspected malingering, had not the physical signs of a firm pleuritic adhesion and a complaint of local pain sometimes given color to the history as originally related. The occurrence of hæmoptysis independently of these cases has been very rare. In the only case of phthisis distinctly made out and terminating fatally, there was no discharge of pure blood from the lungs. Several other cases, it may be mentioned in passing, in which a tuberculous complication of chronic bronchitis was suspected, proved by their perfect restoration to health, that the suspicion was not well founded.

Palpitation of the heart has been a very frequent symptom among the soldiers, occurring in perhaps every case of intercostal neuralgia, but often, also, originating apparently in a state of extreme

exhaustion, especially when produced by prolonged and violent muscular efforts. Its ordinary association with a frequent pulse, or one rendered so by the erect posture, seems to prove it to be an effect of muscular debility of the heart alone, or of that organ along with the rest of the muscular system. It was not attended with any irregularity of the pulse, nor, ordinarily, with any distinct murmur in the heart, not even with a soft, blowing murmur, nor was any such observed in the arteries as an ordinary symptom. Although the number of cases presenting this peculiarity may have been twenty or thirty, there was but one in which distinct evidence of organic disease of the heart was discovered, and that consisted of hypertrophy alone. The associated blowing murmur in the first sound was soft and probably inorganic. This form of cardiac palpitation must be added to the catalogue of diseases very rarely met with in civil practice. Its cure demonstrated its nature; for although it was seldom entirely removed, its improvement generally coincided with the patient's improved nutrition and muscular strength. Quite different in its nature from anaemic palpitation, which shows its true character by pallor of the tissues, translucency of the superficial veins, and a rapid improvement under the administration of iron, in this, on the contrary, the complexion and nutrition of the patient were ordinarily good, his appetite normal, his defecation often regular, and iron proved to be less useful as a remedy than valerian and digitalis; but all of these medicines were less serviceable than rest and time.

The disorders and affections which have been thus summarily described, are all that I have had occasion to observe which presented any peculiarities distinguishing them from such as are met with in civil hospitals and in private practice. Phthisis, Bright's disease, hepatic dropsy, organic heart disease, and chronic affections of the brain which form the majority of chronic cases in ordinary hospitals were rare, and would probably have been still more so, if the rules established for the enlistment of soldiers had been rigorously adhered to. As it is, one cannot refuse believing what has been so often asserted by competent judges, native as well as foreign, that no finer material for soldiers was ever collected than that which forms our patriot army. That it has failed to accomplish all that was justly expected of it is plainly owing not to

the muscle and bone which compose, but to the brains which direct it.

During the present year it is probable that your meetings will often be occupied in listening to the instructive experience which our brethren who have been abroad in hospitals, and camps, and on the battle-field, will bring home for your edification. May the knowledge thus gathered at the cost of toil and danger prove to be a fitting aliment for the quickening and support of your professional life, fertilizing and adorning the garden of medical science, and illustrating the history of our Society long after the fury of the conflict shall have subsided, and when the bitterness of fraternal hatred shall have been forgotten in those gentle feelings which mutual respect, the ties of kindred, and a common inheritance of ancestral glory, must sooner or later inspire.